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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,080	01/17/2002	Rangamani Sundar	110014.139	9833

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT PAPER NUMBER

2617

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,080

Applicant(s)

SUNDAR ET AL

Examiner

Naghmeh Mehrpour

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claim 1**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (European patent application EP 0758187 A1).

Regarding **claim 1**, Johnson teaches a method of internetworking a mobile station to operate in a wireless wide area network WWAN (col 1 lines 50-59), comprising:

provisioning a switch to communicate with the LAN via IP communication (col 4 lines 56-59, col 5 lines 1-23);

the switch receiving mobile station communications via the LAN (col 5 lines 23-40);

the switch converting said mobile station communications to a format compatible with the PBX interface and forwarding the converted communications to the PBX (col 9 lines 5-46, col 10 lines 50-59, col 11 lines 1-20, col 13 lines 7-59, col 14 lines 1-18, col 18 lines 46-59, col 19 lines 1-59)

the PBX receiving and handling the converted communications (col 20 lines 1-31). Johnson does not teach method of internetworking between WLAN and WWAN.

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However, the examiner takes official notice that such a system is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching with Johnson, in order to provide a mobility to the above system.

2. **Claims 2-8**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (European patent application EP 0758187 A1) in view of Yukie (US Publication 2003/0036392)

Regarding **claim 2**, Johnson teaches a method wherein the switch further provisioned to communicate with a WWAN and wherein the switch analyzes the mobile station communications and determines that the communications address an entity external to a domain of the PBX and in response thereto;

Johnson fails to teach a method wherein the switch analyzes the mobile station communications and determines that the communications address an entity external to a domain of the PBX and in response thereto;

the switch requesting a TLDN from a MSC serving the WWAN;

in response to receiving a TLDN from the MSC, the switch sending a message to the PBX to connect the mobile station call to the specified TLDN;

the PBX connecting the mobile station call to the specified TLDN 1150 . However Yukie teaches a method wherein the switch (325) analyzes the mobile station communications and determines that the communications address an entity external to

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a domain of the PBX and in response thereto the switch (325) requesting a TLDN from a MSC serving the WWAN (figure 10, 1020, page 6 sections 0055-0059);

in response to receiving a TLDN from the MSC, the switch (325) sending a message to the PBX (exchange switch) to connect the mobile station call to the specified TLDN (page 6 sections 0055-0060);

the PBX (exchange switch) connecting the mobile station call to the specified TLDN 1150 (page 6 sections 0055- 0059). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yukie with Johnson, in order to prevent call drop and to provide better quality, the mobile that can actively scan for a network by sending out commands and the system automatically transfer the logic connection, while maintaining voice or data communication.

Regarding **claim 3**, Johnson teaches a method further including:

the mobile station roaming during the call (0100);

the mobile station switching to a WWAN air interface protocol (0100, 0106);

the mobile station reconnecting to the call by specifying the TLDN of the call (0100).

Johnson further inherently teaches the mobile switching back to a WWAN automatically (reconnecting) (page 7 section 0067). Johnson fails to teach a mobile station connecting to the call by specifying the TLDN of the call. However, Yukie teaches a method including: a mobile station connecting to the call by specifying the TLDN of the call (page 6 section 0055). Therefore, it would have been obvious to one

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of ordinary skill in the art at the time of the invention to combine the above teaching of Yukie with Johnson, in order to prevent call drops and to provide better quality system that can operates in conjunction of a private system.

Regarding **claim 4**, Johnson teaches a method wherein the mobile station automatically reconnects to the call without user intervention (col 19 lines 6-59).

Regarding **claim 5**, Johnson teaches a method wherein the PBX tears down call connection to the MSC when the mobile station is detected as having lost communication with the switch (col 19 lines 6-59)

Regarding **claim 6**, Johnson teaches a method wherein the PBX maintains call connections to the MSC when the mobile station is detected as having lost communication with the switch (col 12 lines 37-59, col 13 lines 1-45, col 14 lines 26-59, col 17 lines 20-59, col 18 lines 45).

Regarding **claim 7**, Johnson teaches a method further including:

the mobile station roaming during the all (col 18 lines 46-49);

the mobile station determining that it should communicate according to a WWAN air interface protocol while the mobile station is participating in a call under a LAN air interface protocol and in response thereto (col 16 lines 55-59, col 17 lines 1-59, col 18 lines 1-46);

sending a message to a source MSC servicing the LAN that a handoff (roaming) is desired (0078);

the source MSC, analyzing the message, establishing an anchor MSC (LAN), and establishing communication channels with a target MSC servicing a geographic WWAN area in which the mobile station resides (col 18 lines 46-59);

the mobile station beginning communication with the WWAN and the target MSC relaying those communication to the anchor MSC (col 19 lines 1-59). Johnson does not teach method of internetworking between WLAN and WWAN. However, the examiner takes official notice that such a system is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching with Johnson, in order to provide a mobility to the above system.

Regarding **claim 8**, Johnson teaches a method wherein the mobile station informs the MSC serving the LAN of the cell ids of the WWAN geographic area, and wherein the source MSC uses the cell ids information to establish communication channels with the target MSC (col 18 lines 46-59, col 19 lines 1-59).

Response to Arguments

3. Applicant's arguments with respect to claims 1-8, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. **Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

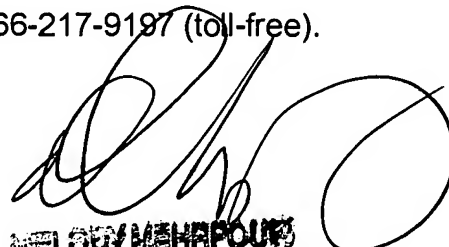
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro be reached (571) 272-7876.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

July 26, 2006



NELOU MEHROUPOUR
PATENT EXAMINER